

## STN Columbus

\* \* \* \* \* Welcome to STN International \* \* \* \* \*

NEWS 1 Web Page URLs for STN Seminar Schedule - N. America  
NEWS 2 "Ask CAS" for self-help around the clock  
NEWS 3 DEC 23 New IPC8 SEARCH, DISPLAY, and SELECT fields in USPATFULL/  
USPAT2  
NEWS 4 JAN 13 IPC 8 searching in IFIPAT, IFIUIDB, and IFICDB  
NEWS 5 JAN 13 New IPC 8 SEARCH, DISPLAY, and SELECT enhancements added to  
INPADOC  
NEWS 6 JAN 17 Pre-1988 INPI data added to MARPAT  
NEWS 7 JAN 17 IPC 8 in the WPI family of databases including WPIFV  
NEWS 8 JAN 30 Saved answer limit increased  
NEWS 9 FEB 21 STN AnaVist, Version 1.1, lets you share your STN AnaVist  
visualization results  
NEWS 10 FEB 22 The IPC thesaurus added to additional patent databases on STN  
NEWS 11 FEB 22 Updates in EPFULL; IPC 8 enhancements added  
NEWS 12 FEB 27 New STN AnaVist pricing effective March 1, 2006  
NEWS 13 FEB 28 MEDLINE/LMEDLINE reload improves functionality  
NEWS 14 FEB 28 TOXCENTER reloaded with enhancements  
NEWS 15 FEB 28 REGISTRY/ZREGISTRY enhanced with more experimental spectral  
property data  
NEWS 16 MAR 01 INSPEC reloaded and enhanced  
NEWS 17 MAR 03 Updates in PATDPA; addition of IPC 8 data without attributes  
NEWS 18 MAR 08 X.25 communication option no longer available after June 2006  
NEWS 19 MAR 22 EMBASE is now updated on a daily basis  
NEWS 20 APR 03 New IPC 8 fields and IPC thesaurus added to PATDPAFULL  
NEWS 21 APR 03 Bibliographic data updates resume; new IPC 8 fields and IPC  
thesaurus added in PCTFULL  
NEWS 22 APR 04 STN AnaVist \$500 visualization usage credit offered  
NEWS 23 APR 12 LINSPEC, learning database for INSPEC, reloaded and enhanced  
NEWS 24 APR 12 Improved structure highlighting in FQHIT and QHIT display  
in MARPAT  
NEWS 25 APR 12 Derwent World Patents Index to be reloaded and enhanced during  
second quarter; strategies may be affected  
  
NEWS EXPRESS FEBRUARY 15 CURRENT VERSION FOR WINDOWS IS V8.01a,  
CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP),  
AND CURRENT DISCOVER FILE IS DATED 19 DECEMBER 2005.  
V8.0 AND V8.01 USERS CAN OBTAIN THE UPGRADE TO V8.01a AT  
<http://download.cas.org/express/v8.0-Discover/>  
  
NEWS HOURS STN Operating Hours Plus Help Desk Availability  
NEWS LOGIN Welcome Banner and News Items  
NEWS IPC8 For general information regarding STN implementation of IPC 8

Enter NEWS followed by the item number or name to see news on that  
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\* \* \* \* \*

COMPLETE THE STN SURVEY - APRIL 27 THROUGH MAY 31

Dear valued STN customer,

## STN Columbus

In an effort to enhance your experience with STN, we would like to better understand what you find useful. Please take approximately 5 minutes to complete a web survey.

If you provide us with your name, login ID, and e-mail address, you will be entered in a drawing to win a free iPod(R). Your responses will be kept confidential and will help us make future improvements to STN.

Take survey: <http://www.zoomerang.com/survey.zqi?p=WEB2259JNKWTUW>

Thank you in advance for your participation.

\* \* \* \* \* STN Columbus \* \* \* \* \*

FILE 'HOME' ENTERED AT 16:27:49 ON 01 MAY 2006

=> fil ca; e US-20040191657/pn

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.21	0.21

FILE 'CA' ENTERED AT 16:28:07 ON 01 MAY 2006

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FILE COVERS 1907 - 27 Apr 2006 VOL 144 ISS 19

FILE LAST UPDATED: 27 Apr 2006 (20060427/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

E1	1	US2004191655/PN
E2	1	US2004191656/PN
E3	1 -->	US2004191657/PN
E4	1	US2004191658/PN
E5	1	US2004191659/PN
E6	1	US2004191660/PN
E7	1	US2004191661/PN
E8	1	US2004191662/PN
E9	1	US2004191663/PN
E10	1	US2004191664/PN
E11	1	US2004191665/PN
E12	1	US2004191666/PN

## STN Columbus

=> s e3

L1 1 US2004191657/PN

=> sel rn

E1 THROUGH E6 ASSIGNED

=> fil reg; s e1-e6

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	2.38	2.59

FILE 'REGISTRY' ENTERED AT 16:28:19 ON 01 MAY 2006  
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Property values tagged with IC are from the ZIC/VINITI data file  
provided by InfoChem.

STRUCTURE FILE UPDATES: 30 APR 2006 HIGHEST RN 882297-19-0  
DICTIONARY FILE UPDATES: 30 APR 2006 HIGHEST RN 882297-19-0

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH January 6, 2006

Please note that search-term pricing does apply when  
conducting SmartSELECT searches.

\*\*\*\*\*  
\*  
\* The CA roles and document type information have been removed from \*  
\* the IDE default display format and the ED field has been added, \*  
\* effective March 20, 2005. A new display format, IDERL, is now \*  
\* available and contains the CA role and document type information. \*  
\*  
\*\*\*\*\*

Structure search iteration limits have been increased. See HELP SLIMITS  
for details.

REGISTRY includes numerically searchable data for experimental and  
predicted properties as well as tags indicating availability of  
experimental property data in the original document. For information  
on property searching in REGISTRY, refer to:

<http://www.cas.org/ONLINE/UG/regprops.html>

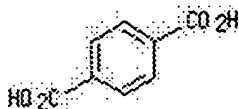
1 100-21-0/BI  
    (100-21-0/RN)  
1 105-08-8/BI  
    (105-08-8/RN)  
1 147-14-8/BI  
    (147-14-8/RN)  
1 16283-36-6/BI  
    (16283-36-6/RN)  
1 32492-61-8/BI  
    (32492-61-8/RN)  
1 552-30-7/BI  
    (552-30-7/RN)  
L2 6 (100-21-0/BI OR 105-08-8/BI OR 147-14-8/BI OR 16283-36-6/BI OR

# STN Columbus

32492-61-8/BI OR 552-30-7/BI)

=> d scan

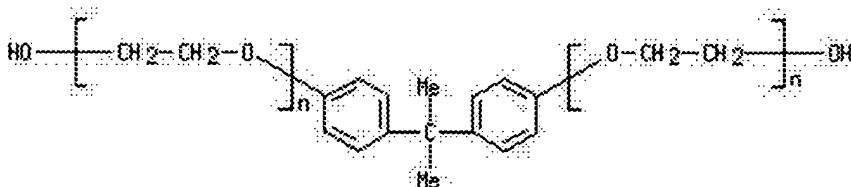
L2 6 ANSWERS REGISTRY COPYRIGHT 2006 ACS on STN  
 IN 1,4-Benzenedicarboxylic acid (9CI)  
 MF C8 H6 O4  
 CI COM



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

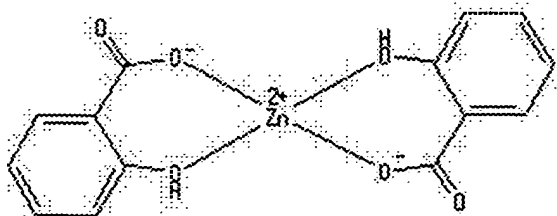
HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1).

L2 6 ANSWERS REGISTRY COPYRIGHT 2006 ACS on STN  
 IN Poly(oxy-1,2-ethanediyl),  $\alpha, \alpha'$ -[(1-methylethylidene)di-4,1-phenylene]bis[ $\omega$ -hydroxy- (9CI)  
 ADDITIONAL NAMES NOT AVAILABLE IN THIS FORMAT  
 MF (C2 H4 O)<sub>n</sub> (C2 H4 O)<sub>n</sub> C15 H16 O2  
 CI PMS, COM



HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1).

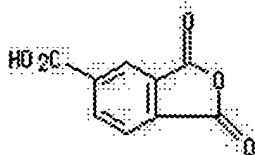
L2 6 ANSWERS REGISTRY COPYRIGHT 2006 ACS on STN  
 IN Zinc, bis[2-(hydroxy- $\kappa$ O)benzoato- $\kappa$ O]-, (T-4)- (9CI)  
 MF C14 H10 O6 Zn  
 CI CCS, COM



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1).

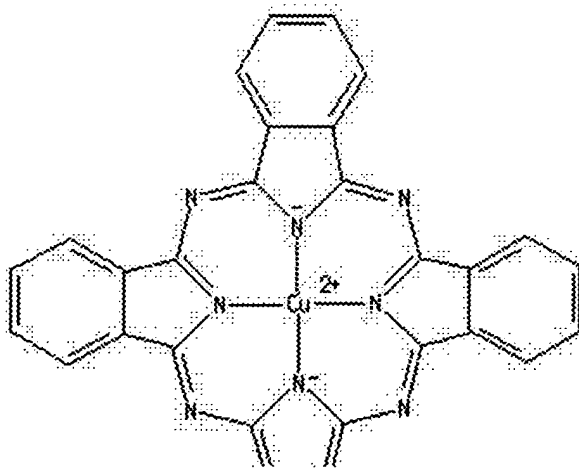
L2 6 ANSWERS REGISTRY COPYRIGHT 2006 ACS on STN  
 IN 5-Isobenzofurancarboxylic acid, 1,3-dihydro-1,3-dioxo- (9CI)  
 MF C9 H4 O5  
 CI COM



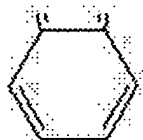
\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1).

L2 6 ANSWERS REGISTRY COPYRIGHT 2006 ACS on STN  
 IN Copper, [29H,31H-phthalocyaninato(2-)-KN29,KN30,KN31,.ka  
 ppa.N32]-, (SP-4-1)- (9CI)  
 ADDITIONAL NAMES NOT AVAILABLE IN THIS FORMAT  
 MF C32 H16 Cu N8  
 CI CCS, COM



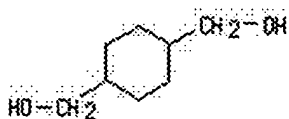
PAGE 1-A



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1) .

L2 6 ANSWERS REGISTRY COPYRIGHT 2006 ACS on STN  
 IN 1,4-Cyclohexanedimethanol (6CI, 7CI, 8CI, 9CI)  
 MF C8 H16 O2  
 CI COM



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

ALL ANSWERS HAVE BEEN SCANNED

=> s 12 and c8h1602/mf  
           0 C8H1602/MF  
 L3          0 L2 AND C8H1602/MF

=> s 12 and c8h16o2/mf  
           2481 C8H16O2/MF  
 L4          1 L2 AND C8H16O2/MF

=> d rn

L4 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2006 ACS on STN  
 RN 105-08-8 REGISTRY

=> s 105-08-8/crn  
 L5          3735 105-08-8/CRN

=> s 15 and polyester/pct  
           192748 POLYESTER/PCT  
 L6          3280 L5 AND POLYESTER/PCT

=> fil ca;		
COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	18.10	20.69

FILE 'CA' ENTERED AT 16:30:17 ON 01 MAY 2006  
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FILE COVERS 1907 - 27 Apr 2006 VOL 144 ISS 19  
FILE LAST UPDATED: 27 Apr 2006 (20060427/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s 16

L7 5130 L6

=> s 17 and toner#

33555 TONER#

L8 89 L7 AND TONER#

=> s 18 and (carnauba or paraffin or wax##)

9194 CARNAUBA

103328 PARAFFIN

107393 WAX##

L9 9 L8 AND (CARNAUBA OR PARAFFIN OR WAX##)

=> d bib hitstr kwic 1-9; fil stnguide

L9 ANSWER 1 OF 9 CA COPYRIGHT 2006 ACS on STN

Full Text

AN 143:123033 CA

TI Electrophotographic **toner** containing polyester and **wax**

IN Matsumura, Kenichi; Niki, Akihiro

PA Sekisui Chemical Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 18 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2005189809	A2	20050714	JP 2004-262729	20040909
PRAI	JP 2003-407795	A	20031205		

IT 25038-91-9P, Terephthalic acid/ethylene glycol/1,4-cyclohexanedimethanol copolymer

RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(electrophotog. **toner** resin compn. and electrophotog. **toners** made thereof)

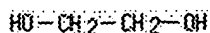
RN 25038-91-9 CA

CN 1,4-Benzenedicarboxylic acid, polymer with 1,4-cyclohexanedimethanol and 1,2-ethanediol (9CI) (CA INDEX NAME)

CM 1

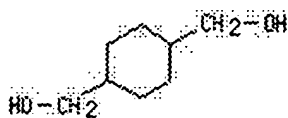
# STN Columbus

CRN 107-21-1  
CMF C2 H6 O2



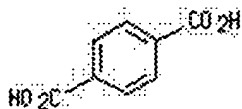
CM 2

CRN 105-08-8  
CMF C8 H16 O2



CM 3

CRN 100-21-0  
CMF C8 H6 O4



- TI Electrophotographic **toner** containing polyester and **wax**
- AB The title **toner** contains cryst. polyester of 180-280° C m.p., amorphous polyester of 30-80° C glass transition temp., and rice **wax**, wherein the content of the rice **wax** is 1-10%. s. The resin provides **toner** of good characteristics on low temp. fixing, high temp. offset-resistance, anti-blocking, and filming-resistance.
- ST electrophotog **toner** resin compn polyester rice **wax**
- IT Electrophotographic **toners**  
(electrophotog. **toner** resin compn. and electrophotog. **toners** made thereof)
- IT Polyesters, preparation  
RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(electrophotog. **toner** resin compn. and electrophotog. **toners** made thereof)
- IT **Waxes**  
(rice bran; electrophotog. **toner** resin compn. and electrophotog. **toners** made thereof)
- IT Bran  
(rice, **waxes**; electrophotog. **toner** resin compn. and electrophotog. **toners** made thereof)
- IT 24968-12-5P 25038-91-9P, Terephthalic acid/ethylene glycol/1,4-cyclohexanedimethanol copolymer 26062-94-2P, Terephthalic acid/1,4-butanediol copolymer 195530-02-0P, Terephthalic acid-isophthalic acid-phthalic anhydride-neopentyl glycol-ethylene glycol copolymer  
RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)



# STN Columbus

(electrophotog. toner resin compn. and electrophotog.  
toners made thereof)

L9 ANSWER 2 OF 9 CA COPYRIGHT 2006 ACS on STN

Full Text

AN 141:380604 CA

TI Compatible multi-functional color concentrate compositions for plastics

IN ~~Nitzsche~~, Norman E.

PA USA

SO U.S. Pat. Appl. Publ., 7 pp.

CODEN: USXXCO

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2004214927	A1	<del>20041028</del>	US 2004-763538	<del>20040123</del>
	CA 2458164	AA	20050820	CA 2004-2458164	20040220
PRAI	US 2003-442211P	P	20030124		

IT 25640-14-6, Eastman 9921

RL: MOA (Modifier or additive use); USES (Uses)

(compatible multifunctional color conc. compns. contg. polymers  
compatible with plastic matrix polymers)

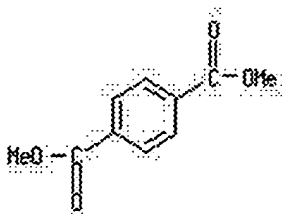
RN 25640-14-6 CA

CN 1,4-Benzenedicarboxylic acid, dimethyl ester, polymer with  
1,4-cyclohexanedimethanol and 1,2-ethanediol (9CI) (CA INDEX NAME)

CM 1

CRN 120-61-6

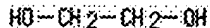
CMF C10 H10 O4



CM 2

CRN 107-21-1

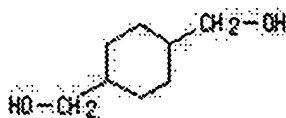
CMF C2 H6 O2



CM 3

CRN 105-08-8

CMF C8 H16 O2



- AB Color conc. compns. are disclosed, which contain colorant(s), wax binder, and polymer compatible with the base polymer to which the conc. is intended to be added. The colorant is preferably one or more pigments. The compatible polymer preferably is the same polymer as the base polymer, although not necessarily the same mol. wt. The binder also serves as a surfactant to protect the compatible polymer. The presence of the compatible polymer in the conc. enhances conc. pellet integrity and adds the function of rheol. modification to the base polymer when the conc. is added.
- ST pigment conc wax binder plastic
- IT **Waxes**  
 RL: MOA (Modifier or additive use); USES (Uses)  
 (conc. binder; compatible multifunctional color conc. compns. contg. polymers compatible with plastic matrix polymers)
- IT Hydrocarbon **waxes**, uses  
 RL: MOA (Modifier or additive use); USES (Uses)  
 (microcryst., conc. binder; compatible multifunctional color conc. compns. contg. polymers compatible with plastic matrix polymers)
- IT **Waxes**  
 RL: MOA (Modifier or additive use); USES (Uses)  
 (oxidized, conc. binder; compatible multifunctional color conc. compns. contg. polymers compatible with plastic matrix polymers)
- IT Amides, uses  
 Soaps  
 RL: MOA (Modifier or additive use); USES (Uses)  
 (waxes, conc. binder; compatible multifunctional color conc. compns. contg. polymers compatible with plastic matrix polymers)
- IT 1248-18-6, Lithol red 1314-41-6, Red lead 12240-15-2, Iron blue 25640-14-6, Eastman 9921 51329-64-7, Chrome Orange 67800-72-0, Chrome green  
 RL: MOA (Modifier or additive use); USES (Uses)  
 (compatible multifunctional color conc. compns. contg. polymers compatible with plastic matrix polymers)
- IT 1343-93-7, Phosphotungstic acid  
 RL: MOA (Modifier or additive use); USES (Uses)  
 (toner; compatible multifunctional color conc. compns. contg. polymers compatible with plastic matrix polymers)
- IT 108-31-6D, Maleic anhydride, reaction products with polyolefins 9002-84-0, PTFE 9002-88-4, Polyethylene 9002-88-4D, Polyethylene, maleated 9003-07-0D, Polypropylene, maleated 24937-78-8, EVA 24980-41-4, Polycaprolactone 25248-42-4, Polycaprolactone  
 RL: MOA (Modifier or additive use); USES (Uses)  
 (waxes, conc. binder; compatible multifunctional color conc. compns. contg. polymers compatible with plastic matrix polymers)

L9 ANSWER 3 OF 9 CA COPYRIGHT 2006 ACS on STN

Full Text

AN 138:229203 CA  
 TI Electrostatographic toner  
 IN Nakamura, Masanobu; Tabayashi, Hideki; Kikuko, Hiroyuki  
 PA Dainippon Ink and Chemicals, Inc., Japan  
 SO Jpn. Kokai Tokkyo Koho, 15 pp.  
 CODEN: JKXXAF  
 DT Patent  
 LA Japanese  
 FAN.CNT 1

# STN Columbus

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2003066652	A2	20030305	JP 2001-257243	20010828
PRAI JP 2001-257243		20010828		

OS MARPAT 138:229203

IT 156209-91-5P 500728-49-4P 500728-50-7P

RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(polyester binder for electrostatog. toner)

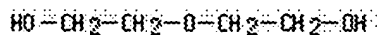
RN 156209-91-5 CA

CN 1,4-Benzenedicarboxylic acid, polymer with 1,4-cyclohexanedimethanol, 1,2-ethanediol and 2,2'-oxybis[ethanol] (9CI) (CA INDEX NAME)

CM 1

CRN 111-46-6

CMF C4 H10 O3



CM 2

CRN 107-21-1

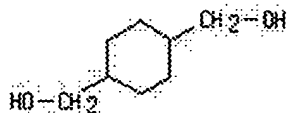
CMF C2 H6 O2



CM 3

CRN 105-08-8

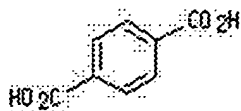
CMF C8 H16 O2



CM 4

CRN 100-21-0

CMF C8 H6 O4



RN 500728-49-4 CA

CN Naphthalenedicarboxylic acid, polymer with 1,4-benzenedicarboxylic acid, 1,4-cyclohexanedimethanol, 2,2-dimethyl-1,3-propanediol and 1,2-ethanediol

# STN Columbus

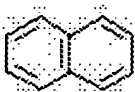
(9CI) (CA INDEX NAME)

CM 1

CRN 28604-87-7

CMF C12 H8 O4

CCI IDS

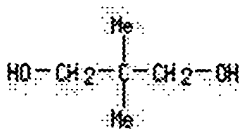


2 [ D1-CO2H ]

CM 2

CRN 126-30-7

CMF C5 H12 O2



CM 3

CRN 107-21-1

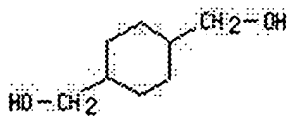
CMF C2 H6 O2

HO-CH2-CH2-OH

CM 4

CRN 105-08-8

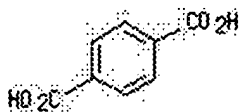
CMF C8 H16 O2



CM 5

CRN 100-21-0

CMF C8 H6 O4



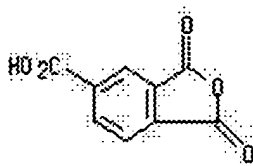
RN 500728-50-7 CA

CN 1,3-Benzenedicarboxylic acid, polymer with 1,4-benzenedicarboxylic acid, 1,4-cyclohexanedimethanol, 1,3-dihydro-1,3-dioxo-5-isobenzofurancarboxylic acid, 2,2-dimethyl-1,3-propanediol and 1,2-ethanediol (9CI) (CA INDEX NAME)

CM 1

CRN 552-30-7

CMF C9 H4 O5



CM 2

CRN 126-30-7

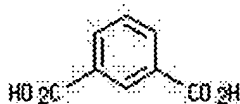
CMF C5 H12 O2



CM 3

CRN 121-91-5

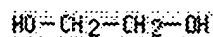
CMF C8 H6 O4



CM 4

CRN 107-21-1

CMF C2 H6 O2



# STN Columbus

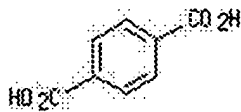
CM 5

CRN 105-08-8  
CMF C8 H16 O2



CM 6

CRN 100-21-0  
CMF C8 H6 O4



- TI Electrostatographic **toner**
- AB Title electrostatog. **toner**, which has good fixing properties, antioffset properties, color reproducibility, and transparency and exhibits stable charging behavior in continuous printing, comprises at least a binder resin, a coloring agent, and a charge-control agent having general structure I (X1, X2 = H, alkyl, alkoxy, NO2, halogen; m, m', n, n' = 1-3; R1, R3 = H, C1-18 alkyl, alkenyl, sulfonamide, mesyl, sulfonic acid, carboxy ester, OH, C1-18 alkoxy, acetyl amino, benzoyl amino, halogen; R2, R4 = H, NO2; A+ = NH4+, H+, Na+, K+). The binder resin is characterized by contg. a polyester having cyclohexanedimethanol as main diol component.
- ST electrostatog **toner** cyclohexanedimethanol polyester binder; charge control agent iron complex electrostatog **toner**
- IT Electrographic **toners**  
(electrostatog. **toner** contg. polyester binder and iron complex charge-control agent)
- IT Carbon black, uses  
**Carnauba wax**  
RL: TEM (Technical or engineered material use); USES (Uses)  
(electrostatog. **toner** contg. polyester binder and iron complex charge-control agent)
- IT Polyesters, properties  
RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(polyester binder for electrostatog. **toner**)
- IT **Waxes**  
RL: TEM (Technical or engineered material use); USES (Uses)  
(scale insect; electrostatog. **toner** contg. polyester binder and iron complex charge-control agent)
- IT 167548-21-2D, salts with mixed cations 191113-15-2D, salts with mixed cations 197526-67-3D, salts with mixed cations  
RL: MOA (Modifier or additive use); USES (Uses)  
(charge-control agent for electrostatog. **toner**)
- IT 61682-73-3, Pentaerythritol tetrabehenate  
RL: TEM (Technical or engineered material use); USES (Uses)  
(electrostatog. **toner** contg. polyester binder and iron complex charge-control agent)

# STN Columbus

IT 156209-91-5P 500728-49-4P 500728-50-7P

RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(polyester binder for electrostatog. toner)

IT 9003-07-0, Polypropylene

RL: TEM (Technical or engineered material use); USES (Uses)  
(wax; electrostatog. toner contg. polyester binder and iron complex charge-control agent)

L9 ANSWER 4 OF 9 CA COPYRIGHT 2006 ACS on STN

Full Text

AN 137:391029 CA

TI Toner containing release agent and low softening point substance for development of electrostatic latent image and manufacture thereof

IN Kamiyama, Mikio; Hayashi, Kenji; Yamazaki, Hiroshi; Omura, Takehsi

PA Konica Co., Japan

SO Jpn. Kokai Tokkyo Koho, 18 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2002341586	A2	20021127	JP 2001-150657	20010521
PRAI	JP 2001-150657		20010521		

IT 33478-30-7P, Adipic acid-1,4-Cyclohexanedimethanol copolymer

RL: PNU (Preparation, unclassified); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(Toner from release agent and low softening point substance)

RN 33478-30-7 CA

CN Hexanedioic acid, polymer with 1,4-cyclohexanedimethanol (9CI) (CA INDEX NAME)

CM 1

CRN 124-04-9

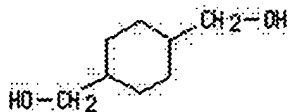
CMF C6 H10 O4

HO<sub>2</sub>C-(CH<sub>2</sub>)<sub>4</sub>-CO<sub>2</sub>H

CM 2

CRN 105-08-8

CMF C8 H16 O2



TI Toner containing release agent and low softening point substance for development of electrostatic latent image and manufacture thereof

AB The title toner comprises a resin, a colorant, a release agent, and a low softening point substance, wherein the release agent (R) and the low softening point substance (L) have relations  $2 \leq R/L \leq 15$  at near the toner surface and  $0.05 \leq R/L \leq 0.5$  in the inside.

# STN Columbus

The process involving salting out/fusion is also claimed. The **toner** may be coated by particles made up of a cryst. polyester and a **wax**. The **toner** having above relations between the release agent and the low softening point substance provided excellent fixing and releasing properties.

ST electrophotog **toner** release agent low softening point substance  
 IT Electrophotographic **toners**  
     (Toner from release agent and low softening point substance)  
 IT Polyesters, uses  
     RL: TEM (Technical or engineered material use); USES (Uses)  
     (Toner from release agent and low softening point substance)  
 IT 25036-16-2P, Butyl acrylate-methacrylic acid-styrene copolymer  
     25569-53-3P, Ethylene glycol-succinic acid copolymer 25667-11-2P,  
     Ethylene glycol-succinic acid copolymer, sru 26745-88-0P,  
     1,6-Hexanediol-sebacic acid copolymer 26762-10-7P, 1,6-Hexanediol-  
     sebacic acid copolymer, sru 32106-90-4P, Adipic acid-1,4-  
     Cyclohexanedimethanol copolymer, sru 33478-30-7P, Adipic  
     acid-1,4-Cyclohexanedimethanol copolymer  
     RL: PNU (Preparation, unclassified); TEM (Technical or engineered material  
     use); PREP (Preparation); USES (Uses)  
     (Toner from release agent and low softening point substance)  
 IT 61682-73-3  
     RL: TEM (Technical or engineered material use); USES (Uses)  
     (Toner from release agent and low softening point substance)

L9 ANSWER 5 OF 9 CA COPYRIGHT 2006 ACS on STN

## Full Text

AN 136:301763 CA  
 TI Color **toner** for developing an electrostatic image  
 IN Aoki, Megumi; Inoue, Masahide; Mikuriya, Yoshihiro; Hagi, Masayuki  
 PA Japan  
 SO U.S. Pat. Appl. Publ., 11 pp.  
     CODEN: USXXCO  
 DT Patent  
 LA English  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2002042013	A1	20020411	US 2001-920716	20010803
	US 6503679	B2	20030107		
	JP 2002131969	A2	20020509	JP 2001-237724	20010806
PRAI	JP 2000-239725	A	20000808		

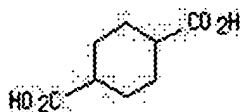
IT 407629-54-3P, 1,4-Cyclohexanedimethanol-1,4-  
 cyclohexanedicarboxylic acid-isophthalic acid-terephthalic  
 acid-trimellitic acid copolymer  
 RL: PRP (Properties); SPN (Synthetic preparation); TEM (Technical or  
 engineered material use); PREP (Preparation); USES (Uses)  
     (cryst. resin; color **toner** for developing electrostatic image  
     contg.)  
 RN 407629-54-3 CA  
 CN 1,2,4-Benzenetricarboxylic acid, polymer with 1,3-benzenedicarboxylic  
 acid, 1,4-benzenedicarboxylic acid, 1,4-cyclohexanedicarboxylic acid and  
 1,4-cyclohexanedimethanol (9CI) (CA INDEX NAME)

CM 1

CRN 1076-97-7  
 CMF C8 H12 O4



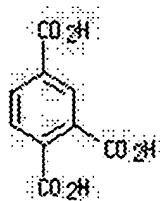
# STN Columbus



CM 2

CRN 528-44-9

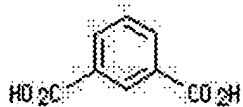
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CM 3

CRN 121-91-5

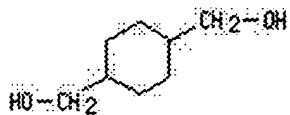
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CM 4

CRN 105-08-8

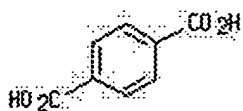
CMF C8 H16 O2



CM 5

CRN 100-21-0

CMF C8 H6 O4



TI Color toner for developing an electrostatic image  
AB The present invention provides a color toner for developing an

# STN Columbus

electrostatic image having excellent light transmission for OHP and fixing efficiency, said color toner effectively preventing a low temp. offset and a high temp. offset when it is applied to a fixing device whose coating wt. of an oil is reduced. The color toner is characterized in that (1) it comprises a binding resin and a colorant; (2) its storage elastic modulus at 90° C. ( $G'_{90}$ ) is  $\leq 6 \times 10^4$  Pa; (3) its storage elastic modulus at 140° C. ( $G'_{140}$ ) is  $\geq 5 \times 10^2$  Pa; (4) a temp. showing a max. value of  $\delta$  in  $\tan \delta = G''/G'$  (wherein  $G'$  is a storage elastic modulus of the color toner, and  $G''$  is a loss elastic modulus of the color toner) exists in the range of 90–120° C.; and (5) the max. value of  $\delta$  is  $\geq 60^\circ$ .

- ST electrog color toner development resin
- IT Electrographic toners  
(color toner for developing electrostatic image)
- IT Electrophotography  
(development; color toner for developing electrostatic image)
- IT 407629-55-4P, Ethoxylated Bisphenol A-ethylene glycol-dodecenylsuccinic acid-terephthalic acid copolymer  
RL: PRP (Properties); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(color toner for developing electrostatic image contg.)
- IT 79293-17-7P, Ethoxylated Bisphenol A-ethylene glycol-terephthalic acid copolymer 178156-11-1P, Bisphenol A-ethylene oxide adduct-ethylene glycol-terephthalic acid-trimethylolpropane copolymer 407629-53-2P, Ethoxylated Bisphenol A-cyclohexanedimethanol-terephthalic acid-trimethylolpropane copolymer 407629-54-3P, 1,4-Cyclohexanedimethanol-1,4-cyclohexanedicarboxylic acid-isophthalic acid-terephthalic acid-trimellitic acid copolymer 407629-56-5P, Ethoxylated Bisphenol A-ethylene glycol-terephthalic acid-trimethylolpropane-trimellitic acid copolymer  
RL: PRP (Properties); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(cryst. resin; color toner for developing electrostatic image contg.)
- IT 115231-88-4P, Bisphenol A-ethylene oxide adduct-Bisphenol A-propylene oxide adduct-fumaric acid-terephthalic acid copolymer 130467-46-8P, Ethoxylated Bisphenol A-propoxylated Bisphenol A-dodecenylsuccinic acid-terephthalic acid-trimellitic acid copolymer  
RL: PRP (Properties); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(resin; color toner for developing electrostatic image contg.)
- IT 9002-88-4, Polyethylene 9003-07-0, Polypropylene  
RL: TEM (Technical or engineered material use); USES (Uses)  
(wax; color toner for developing electrostatic image contg.)

L9 ANSWER 6 OF 9 CA COPYRIGHT 2006 ACS on STN

## Full Text

AN 133:342435 CA

TI Electrophotographic dry toner and method for image formation

IN Kawamoto, Keishi; Ono, Manabu; Hashimoto, Akira; Handa, Satoshi; Kukimoto, Isamu

PA Canon Inc., Japan

SO Jpn. Kokai Tokkyo Koho, 32 pp.  
CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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# STN Columbus

PI JP 2000305320 A2 20001102 JP 1999-116088 19990423

PRAI ~~JP 1999-116088~~ 19990423

IT 304697-62-9P, Adipic acid-1,3-cyclohexanedicarboxylic acid-1,4-cyclohexanedimethanol-1,3,5-cyclohexanetricarboxylic acid-hydrogenated bisphenol A copolymer 304697-64-1P, Adipic acid-1,4-cyclohexanedicarboxylic acid-1,4-cyclohexanedimethanol-1,3,5-cyclohexanetricarboxylic acid-hydrogenated bisphenol A copolymer 304697-65-2P, 1,4-Cyclohexanedimethanol-ethoxylated hydrogenated bisphenol A-ethylene glycol-hydrogenated bisphenol A-isophthalic acid-propylene glycol-terephthalic acid-trimellitic acid copolymer  
 RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
 (polyester resin in electrophotog. toners)

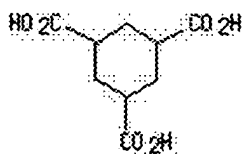
RN 304697-62-9 CA

CN 1,3,5-Cyclohexanetricarboxylic acid, polymer with 1,3-cyclohexanedicarboxylic acid, 1,4-cyclohexanedimethanol, hexanedioic acid and 4,4'-(1-methylethylidene)bis[cyclohexanol] (9CI) (CA INDEX NAME)

CM 1

CRN 25357-95-3

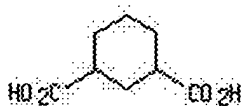
CMF C9 H12 O6



CM 2

CRN 3971-31-1

CMF C8 H12 O4



CM 3

CRN 124-04-9

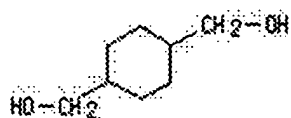
CMF C6 H10 O4



CM 4

CRN 105-08-8

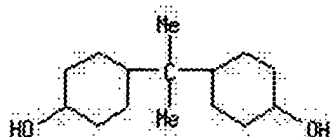
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CM 5

CRN 80-04-6

CMF C15 H28 O2



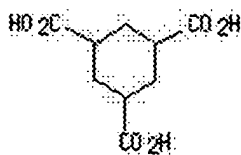
RN 304697-64-1 CA

CN 1,3,5-Cyclohexanetricarboxylic acid, polymer with 1,4-cyclohexanedimethanol, hexanedioic acid and 4,4'-(1-methylethylidene)bis[cyclohexanol] (9CI) (CA INDEX NAME)

CM 1

CRN 25357-95-3

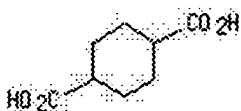
CMF C9 H12 O6



CM 2

CRN 1076-97-7

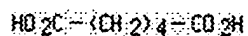
CMF C8 H12 O4



CM 3

CRN 124-04-9

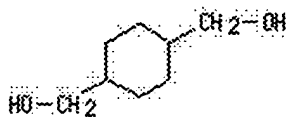
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CM 4

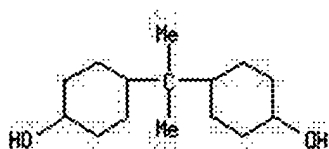
# STN Columbus

CRN 105-08-8  
CMF C8 H16 O2



CM 5

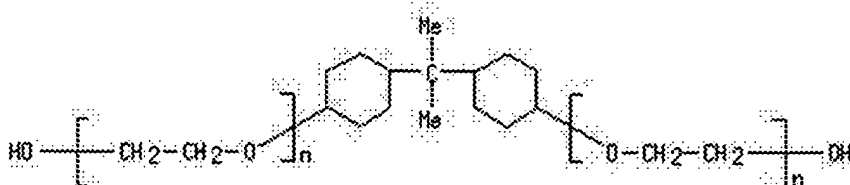
CRN 80-04-6  
CMF C15 H28 O2



RN 304697-65-2 CA  
CN 1,2,4-Benzenetricarboxylic acid, polymer with 1,3-benzenedicarboxylic acid, 1,4-benzenedicarboxylic acid, 1,4-cyclohexanedimethanol, 1,2-ethanediol, 4,4'-(1-methylethylidene)bis[cyclohexanol],  $\alpha, \alpha'$ -[(1-methylethylidene)di-4,1-cyclohexanediyl]bis[ $\omega$ -hydroxypoly(oxy-1,2-ethanediyl)] and 1,2-propanediol (9CI) (CA INDEX NAME)

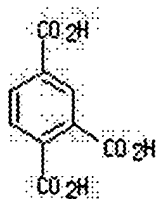
CM 1

CRN 62580-01-2  
CMF (C2 H4 O)<sub>n</sub> (C2 H4 O)<sub>n</sub> C15 H28 O2  
CCI PMS



CM 2

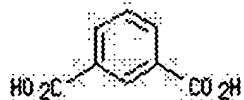
CRN 528-44-9  
CMF C9 H6 O6



CM 3

CRN 121-91-5

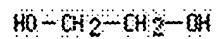
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CM 4

CRN 107-21-1

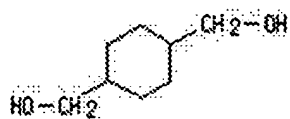
CMF C2 H6 O2



CM 5

CRN 105-08-8

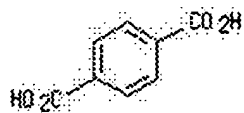
CMF C8 H16 O2



CM 6

CRN 100-21-0

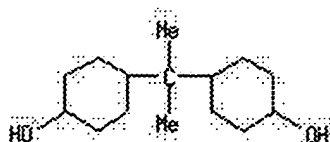
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CM 7

CRN 80-04-6

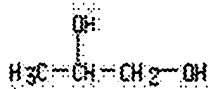
CMF C15 H28 O2



CM 8

CRN 57-55-6

CMF C3 H8 O2



- TI Electrophotographic dry **toner** and method for image formation
- AB The title **toner** contains a binder resin, a colorant, **wax**, and a polyester resin having an alicyclic group, wherein the polyester resin is prepd. from polycarboxylic acid and a polyalc. and is contained 0.1-50 %. The **toner** has 2-10  $\mu\text{m}$  no. av. particle diam., 0.950-0.995 spherical shape coeff., and  $\leq 0.040$  std. deviation of the roundness degree. The **toner** provides the excellent performance under various environmental conditions and the high quality image.
- ST electrophotog dry **toner** polyester resin
- IT Electrophotographic **toners**  
(dry; electrophotog. dry **toner** and method for image formation)
- IT Polyesters, preparation  
RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(polyester resin in electrophotog. **toners**)
- IT 304697-62-9P, Adipic acid-1,3-cyclohexanedicarboxylic acid-1,4-cyclohexanedimethanol-1,3,5-cyclohexanetricarboxylic acid-hydrogenated bisphenol A copolymer 304697-63-0P, 1,4-Cyclohexanedicarboxylic acid-1,4-cyclohexanediol-1,3,5-cyclohexanetricarboxylic acid-hydrogenated bisphenol A copolymer 304697-64-1P, Adipic acid-1,4-cyclohexanedicarboxylic acid-1,4-cyclohexanedimethanol-1,3,5-cyclohexanetricarboxylic acid-hydrogenated bisphenol A copolymer 304697-65-2P, 1,4-Cyclohexanedimethanol-ethoxylated hydrogenated bisphenol A-ethylene glycol-hydrogenated bisphenol A-isophthalic acid-propylene glycol-terephthalic acid-trimellitic acid copolymer 304697-66-3P, 1,3-Cyclohexanedicarboxylic acid-1,4-cyclohexanediol-1,3,5-cyclohexanetricarboxylic acid-decenylsuccinic anhydride-ethoxylated bisphenol A-ethoxylated hydrogenated bisphenol A-isophthalic acid-propoxylated bisphenol A-terephthalic acid copolymer  
RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(polyester resin in electrophotog. **toners**)

L9 ANSWER 7 OF 9 CA COPYRIGHT 2006 ACS on STN

Full Text

AN 139:303583 CA

TI Topcoats for improved laser printing and methods of using the same

IN Waterman, Michael T.; Meader, Christopher D.; Lender, Paul

PA Avery Dennison Corp., USA

SO PCT Int. Appl., 28 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2000060024	A1	20001012	WO 2000-US9335	20000407
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU,				

# STN Columbus

ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU,  
 LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE,  
 SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW,  
 AM, AZ, BY, KG, KZ, MD, RU, TJ, TM  
 RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE,  
 DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF,  
 CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRAI US 1999-128130P P 19990407

IT 54590-72-6 146090-39-3

RL: TEM (Technical or engineered material use); USES (Uses)  
 (toner receptive topcoats for laser printing materials)

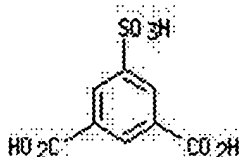
RN 54590-72-6 CA

CN 1,3-Benzenedicarboxylic acid, 5-sulfo-, monosodium salt, polymer with  
 1,3-benzenedicarboxylic acid, 1,4-cyclohexanedimethanol and  
 2,2'-oxybis[ethanol] (9CI) (CA INDEX NAME)

CM 1

CRN 6362-79-4

CMF C8 H6 O7 S . Na

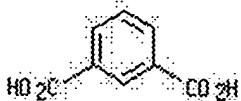


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CM 2

CRN 121-91-5

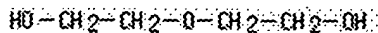
CMF C8 H6 O4



CM 3

CRN 111-46-6

CMF C4 H10 O3

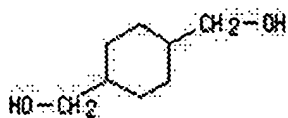


CM 4

CRN 105-08-8

CMF C8 H16 O2





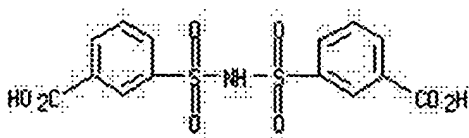
RN 146090-39-3 CA

CN 1,4-Benzenedicarboxylic acid, polymer with 1,4-benzenedimethanol,  
1,4-cyclohexanedimethanol, 3,3'-[iminobis(sulfonyl)]bis[benzoic acid]  
disodium salt and propanedioic acid (9CI) (CA INDEX NAME)

CM 1

CRN 65697-08-7

CMF C14 H11 N O8 S2 . 2 Na

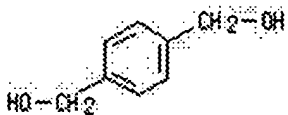


\* 2 Na

CM 2

CRN 589-29-7

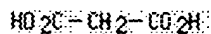
CMF C8 H10 O2



CM 3

CRN 141-82-2

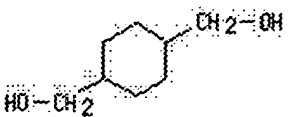
CMF C3 H4 O4



CM 4

CRN 105-08-8

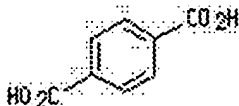
CMF C8 H16 O2



CM 5

CRN 100-21-0

CMF C8 H6 O4



RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

- AB **Toner** receptive topcoats having improved fusion and anchorage of color **toners** on a laser-printable support are composed of a polymer binder and, optionally, ≥1 functional additive. The **toner**-receptive topcoat can be an aq. topcoat compn. comprising a major amt. of a solvent and a minor amt. of a polymeric binder in order to obtain a **toner** adhesion rating of greater than or equal to about 15 g in the BYK-Gardner test on a thick facestock. Thus, a compn. contg. deionized water, Drewplus L474, Eastman AQ35S MSP 250-50, and Plasthall 705Q was coated on a facestock, dried and imaged with a color printer to give a printed having excellent **toner** adhesion.
- ST topcoat color **toner** adhesion laser printing
- IT Polyurethanes, uses  
RL: TEM (Technical or engineered material use); USES (Uses)  
(acrylic; **toner** receptive topcoats for laser printing materials)
- IT Electrophotographic paper  
(color; **toner** receptive topcoats for laser printing materials)
- IT Hydrocarbon **waxes**, uses  
RL: TEM (Technical or engineered material use); USES (Uses)  
(microcryst., MSP 250-50; **toner** receptive topcoats for laser printing materials)
- IT Acrylic polymers, uses  
RL: TEM (Technical or engineered material use); USES (Uses)  
(polyurethane-; **toner** receptive topcoats for laser printing materials)
- IT Polyesters, uses  
RL: TEM (Technical or engineered material use); USES (Uses)  
(sulfonated and nonsulfonated; **toner** receptive topcoats for laser printing materials)
- IT Polyoxyalkylenes, uses  
Polyurethanes, uses  
Silica gel, uses  
RL: TEM (Technical or engineered material use); USES (Uses)  
(**toner** receptive topcoats for laser printing materials)
- IT 471-34-1, Carbital 75, uses 9003-20-7, Vinac XX210 9003-39-8, Polyvinylpyrrolidone 9088-08-8, Paraplex G-54 25322-68-3 39382-25-7, FineTone 382ES 54590-72-6 77466-39-8, Plasthall 7050 146090-39-3 165245-61-4, Flexthane 620 184538-74-7, AQ 35S 199343-66-3, NeoRez 9320 301526-77-2, Drewplus L 474  
RL: TEM (Technical or engineered material use); USES (Uses)  
(**toner** receptive topcoats for laser printing materials)

L9 ANSWER 8 OF 9 CA COPYRIGHT 2006 ACS on STN

Full Text

AN 133:288816 CA

TI Electrophotographic **toner** in two-component electrophotographic developer

## STN Columbus

and method for image formation using same  
 IN Yoshino, Susumu; Ohya, Yasuhiro; Ninomiya, Masanobu; Hamano, Koichi;  
 Yoshihara, Kotaro; Ohishi, Kaori; Taguchi, Tetsuya  
 PA Fuji Xerox Co., Ltd., Japan  
 SO Jpn. Kokai Tokkyo Koho, 10 pp.  
 CODEN: JKXXAF  
 DT Patent  
 LA Japanese  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2000267338	A2	20000929	JP 1999-69286	19990315
PRAT	JP 1999-69286		19990315		

IT 299422-43-8P, Terephthalic acid-ethoxylated bisphenol  
 A-propoxylated bisphenol A-1,2-cyclohexanedimethanol copolymer  
 RL: SPN (Synthetic preparation); TEM (Technical or engineered material  
 use); PREP (Preparation); USES (Uses)  
 (binder resin electrophotog. toner)

RN 299422-43-8 CA

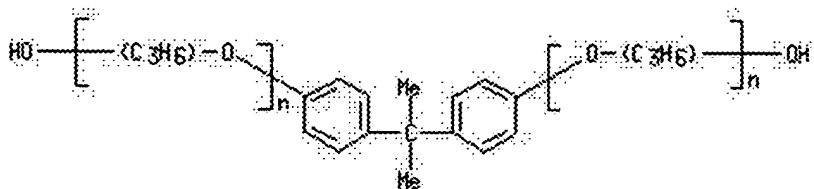
CN 1,4-Benzenedicarboxylic acid, polymer with 1,4-cyclohexanedimethanol,  
 $\alpha, \alpha'$ -[(1-methylethylidene)di-4,1-phenylene]bis[ $\omega$ -  
 hydroxypoly(oxy-1,2-ethanediyl)] and  $\alpha, \alpha'$ -[(1-  
 methylethylidene)di-4,1-phenylene]bis[ $\omega$ -hydroxypoly(oxy(methyl-1,2-  
 ethanediyl))] (9CI) (CA INDEX NAME)

CM 1

CRN 37353-75-6

CMF (C3 H6 O)n (C3 H6 O)n C15 H16 O2

CCI IDS, PMS

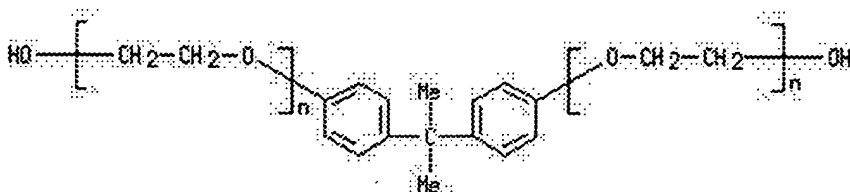


CM 2

CRN 32492-61-8

CMF (C2 H4 O)n (C2 H4 O)n C15 H16 O2

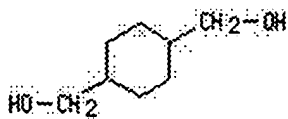
CCI PMS



CM 3

CRN 105-08-8

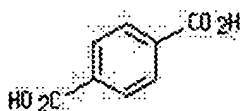
CMF C8 H16 O2



CM 4

CRN 100-21-0

CMF C8 H6 O4



- TI Electrophotographic **toner** in two-component electrophotographic developer and method for image formation using same
- AB The title **toner** has a binder resin, a colorant, and **wax**, wherein the **wax** has 40-120 °C heat-absorbing temp. according to a differential scanning calorimeter, 80-120 °C m.p., and 1-200 cp melt viscosity at 120 °C. The **toner** has a specific shape const., and 1.9-4.0 sp. surface area, and 3-10 µm vol. av. particle diam. The **toner** shows the excellent storageability and offset-resistance.
- ST electrophotog **toner wax** two component developer
- IT Polyesters, preparation  
RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(binder resin in electrophotog. **toner**)
- IT **Waxes**  
RL: TEM (Technical or engineered material use); USES (Uses)  
(electrophotog. **toner**)
- IT Electrophotographic developers  
Electrophotographic **toners**  
Electrophotography  
(electrophotog. **toner** in two-component electrophotog. developer and method for image formation using same)
- IT **Carnauba wax**  
RL: TEM (Technical or engineered material use); USES (Uses)  
(**wax** in electrophotog. **toner**)
- IT 160970-95-6P, Isopropenyltoluene-indene copolymer **299422-43-8P**, Terephthalic acid-ethoxylated bisphenol A-propoxylated bisphenol A-1,2-cyclohexanedimethanol copolymer  
RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(binder resin electrophotog. **toner**)
- IT 142689-49-4P, Terephthalic acid-ethoxylated bisphenol A-cyclohexanedimethanol copolymer  
RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(binder resin in electrophotog. **toner**)
- IT 22413-03-2, Behenyl stearate 109376-47-8  
RL: TEM (Technical or engineered material use); USES (Uses)  
(**wax** in electrophotog. **toner**)

L9 ANSWER 9 OF 9 CA COPYRIGHT 2006 ACS on STN

Full Text

# STN Columbus

AN 110:104876 CA  
 TI Electrostatographic heat-fixable microencapsulated toners  
 IN Matsubara, Akitoshi; Takahashi, Jiro  
 PA Konica Co., Japan  
 SO Jpn. Kokai Tokkyo Koho, 13 pp.  
 CODEN: JKXXAF

DT Patent  
 LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 63128360	A2	19880531	JP 1986-274183	19861119
PRAI	JP 1986-274183		19861119		

IT 119131-33-8

RL: USES (Uses)

(binders, electrostatog. heat-fixable microencapsulated toners  
 with core particles contg.)

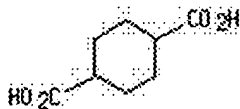
RN 119131-33-8 CA

CN 1,4-Cyclohexanedicarboxylic acid, polymer with 1,4-cyclohexanedimethanol  
 and 1,3-dihydro-1,3-dioxo-5-isobenzofurancarboxylic acid (9CI) (CA INDEX  
 NAME)

CM 1

CRN 1076-97-7

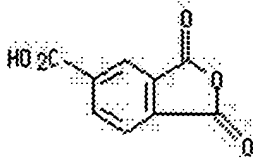
CMF C8 H12 O4



CM 2

CRN 552-30-7

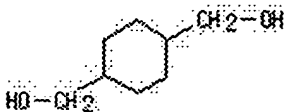
CMF C9 H4 O5



CM 3

CRN 105-08-8

CMF C8 H16 O2



TI Electrostatographic heat-fixable microencapsulated toners

# STN Columbus

AB A nonlinear polymer such as a crosslinked polymer and a wax are included in heat-fusible core particles and a thermoplastic polymer is used as a shell material to produce electrostatog. microencapsulated toner particles with improved offset resistance, low temp. fixability, and wide fixable temp. ranges. The nonlinear polymer may be the Bu acrylate-Divinylbenzene-Me methacrylate- $\alpha$ -methylstyrene-styrene copolymer. A paraffin wax such as Sazol Wax H 1 having m.p. 108° may be included in the core particles to reduce toner stain on fixing rollers. Thermoplastic acrylic acid-Bu acrylate-Me methacrylate-styrene copolymer may be used as the shell material.

ST electrostatog heat fixing toner microcapsule

IT Paraffin waxes and Hydrocarbon waxes, uses and miscellaneous

RL: USES (Uses)  
(binders, electrostatog. heat-fixable microencapsulated toners with core particles contg.)

IT Polyesters, uses and miscellaneous

RL: USES (Uses)  
(nonlinear, binders, electrostatog. heat-fixable microencapsulated toners with core particles contg.)

IT Electrography  
(developers, toners, microencapsulated, core particles contg. nonlinear polymer and wax for)

IT Fatty acids, esters

RL: USES (Uses)  
(montan-wax, esters, with ethylene glycol, binders, electrostatog. heat-fixable microencapsulated toners with core particles contg. Hoechst Wax E)

IT Electrophotographic developers  
(toners, microencapsulated, core particles contg. nonlinear polymer and wax for)

IT 119131-32-7 119131-33-8 119131-48-5

RL: USES (Uses)  
(binders, electrostatog. heat-fixable microencapsulated toners with core particles contg.)

IT 27306-39-4, Acrylic acidbutyl acrylatemethyl methacrylate-styrene copolymer

RL: USES (Uses)  
(thermoplastic, electrostatog. heat-fixable microencapsulated toners with shell materials from)

COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	54.94	75.63
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL
	ENTRY	SESSION
CA SUBSCRIBER PRICE	-6.39	-6.39

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LAST RELOADED: Apr 21, 2006 (20060421/UP).

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	ENTRY	SESSION

# STN Columbus

FULL ESTIMATED COST	0.06	75.69
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 FILE LAST UPDATED: 27 Apr 2006 (20060427/ED)

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 SEL RN

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 L3 0 S L2 AND C8H16O2/MF  
 L4 1 S L2 AND C8H16O2/MF  
 L5 3735 S 105-08-8/CRN  
 L6 3280 S L5 AND POLYESTER/PCT

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 L8 89 S L7 AND TONER#  
 L9 9 S L8 AND (CARNAUBA OR PARAFFIN OR WAX##)

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